

LCK recombinant protein

Recombinant LCK protein

CATALOG #
AAA60254

HOST
Baculovirus

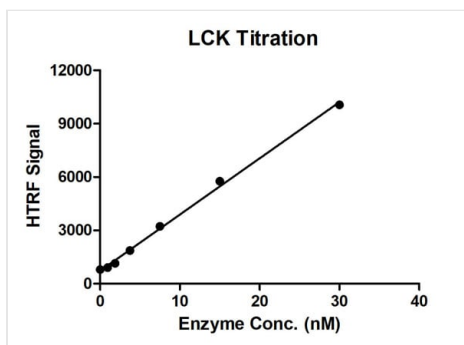
PRODUCT SYNONYMS

LCK; Recombinant LCK protein; LCK Proto-Oncogene; Src Family Tyrosine Kinase; LCK recombinant protein

PRODUCT SPECIFICATIONS

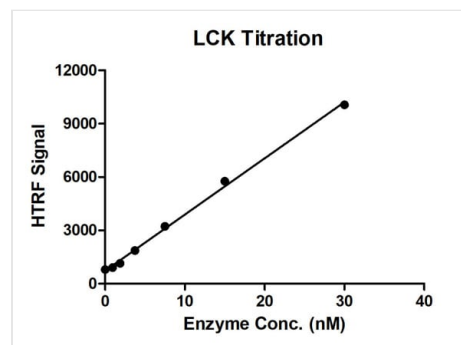
Host	Baculovirus
Form/Format	Recombinant LCK protein is supplied in 25mM HEPES-NaOH pH7.5, 300mM NaCl, 10% glycerol, 0.04% Triton X-100, 0.5mM TCEP.
Concentration	0.15 ug/ul (varies by lot)
Protein Details	Recombinant LCK protein was expressed in baculovirus expression system as the full length protein (accession number NP_001036236.1) with a N-terminal DYKDDDDK tag.
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



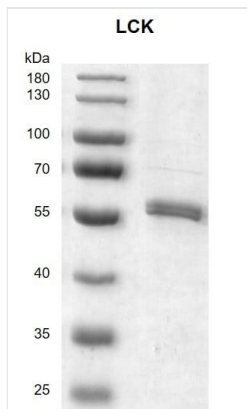
Application Data

HTRF assay for LCK activity 1 uM TK substrate was incubated with different concentrations of LCK protein in a 10 ul reaction system containing 1xEnzymatic Buffer, 5 mM MgCl₂, 5 nM SEB, 1 mM DTT and 100 uM ATP for 1 hour. The 10 ul detection reagents containing TK antibody (1:2) and SA-XL665 (1:100) diluted with 1x Detection Buffer were added and incubated with the reactions for 30 min. All the operations and reactions were performed at room temperature. HTRF assay was used for detection.



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SDS-PAGE

Recombinant LCK protein 10% SDS-PAGE with Coomassie staining MW: 59.3 kDa Purity: >90%

ADDITIONAL INFORMATION

Related Product Information for LCK recombinant protein	Background: LCK (LCK Proto-Oncogene, Src Family Tyrosine Kinase) is a non-receptor tyrosine-protein kinase that plays an essential role in the selection and maturation of developing T-cells in the thymus and in the function of mature T-cells. It plays a key role in T-cell antigen receptor (TCR)-linked signal transduction pathways. Constitutively associated with the cytoplasmic portions of the CD4 and CD8 surface receptors. Association of the TCR with a peptide antigen-bound MHC complex facilitates the interaction of CD4 and CD8 with MHC class II and class I molecules, respectively, thereby recruiting the associated LCK protein to the vicinity of the TCR/CD3 complex. LCK then phosphorylates tyrosine residues within the immunoreceptor tyrosine-based activation motifs (ITAM) of the cytoplasmic tails of the TCR-gamma chains and CD3 subunits, initiating the TCR/CD3 signaling pathway. Once stimulated, the TCR recruits the tyrosine kinase ZAP70, that becomes phosphorylated and activated by LCK. Following this, a large number of signaling molecules are recruited, ultimately leading to lymphokine production. LCK phosphorylates other substrates including RUNX3, PTK2B/PYK2, the microtubule-associated protein MAPT, RHOH or TYROBP.
Product Categories/Family for LCK recombinant protein	Recombinant Proteins ; Kinase

NCBI AND UNIPROT INFORMATION

NCBI GI #	112789548
NCBI GeneID	3932
NCBI Accession #	NP_001036236.1
NCBI GenBank Nucleotide #	NM_001042771.1
UniProt Accession #	P06239; P07100; Q12850; Q13152; Q5TDH8; Q5TDH9; Q7RTZ3; Q96DW4; Q9NYT8; D3DPP8
Molecular Weight	59.3 kDa
NCBI Official Full Name	tyrosine-protein kinase Lck
NCBI Official Synonym Full Names	lymphocyte-specific protein tyrosine kinase
NCBI Official Symbol	LCK
NCBI Official Synonym Symbols	LSK; YT16; p56lck; pp58lck
NCBI Protein Information	tyrosine-protein kinase Lck; leukocyte C-terminal Src kinase; p56(LSTRA) protein-tyrosine kinase; t cell-specific protein-tyrosine kinase; proto-oncogene tyrosine-protein kinase LCK; lymphocyte cell-specific protein-tyrosine kinase; T-lymphocyte specific
UniProt Protein Name	Tyrosine-protein kinase Lck
UniProt Gene Name	LCK

UniProt Synonym Gene Names	LSK
UniProt Entry Name	LCK_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/lck-recombinant-protein-baculovirus/60254>